

IFW
AF/2666
89

WFVA/NOKIA File Nos.: 944-003.027-1/NC 32439 US

PATENT

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Re application of: Jussi Numminen

Serial No.: 09/930,379 : Examiner: S. C. Hom

Filed: August 15, 2001 : Group Art Unit: 2666

For: METHOD AND APPARATUS FOR DISCONTINUOUS
RECEPTION SCHEME AND POWER SAVING MODE
FOR USER EQUIPMENT IN PACKET ACCESS MODE

MAIL STOP APPEAL BRIEFS - PATENTS

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

BRIEF FOR APPELLANT

Sir:

This is an appeal from an Official Action mailed May 3, 2004, made final, including an Advisory Action mailed August 9, 2004.¹

A Notice of Appeal was mailed on September 16, 2004 with a return receipt postcard. The Patent Office stamped and mailed the return receipt postcard back to applicant on September 20, 2004.

This Brief is being filed in triplicate with a fee in the amount of \$340.00 in accordance with 37 CFR §1.17(c).

11/26/2004 FMETEK11 00000045 09930379

01 FC:1402

340.00 OP

¹ I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, Alexandria, VA 22313-1450.

Debra A. Pongetti
Debra A. Pongetti

November 22, 2004
Date

I. THE REAL PARTY IN INTEREST

The real party in interest is Nokia Mobile Phones, Ltd., a corporation duly organized and existing under the laws of Finland, and having a principal place of business at Keilalahdentie 4, FIN-02150, ESPOO, Finland.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals and interferences.

III. STATUS OF CLAIMS

Claims 1 - 29 are pending.

Claims 1-6 and 10-16 and 21-29 stand rejected, and are being appealed.

Dependent claims 7-9 and 17-20 are objected to but indicated to be allowable if amended to include the limitations from the base claim from which they depend and any intervening claims.

IV. STATUS OF AMENDMENTS

No amendment was filed subsequent to the May 3rd Final Rejection.

V. SUMMARY OF THE INVENTION

1. The Problem In The Art

In the prior art, the form and content of information being transmitted over wireless telecommunications systems has changed dramatically over the last decade. In first generation wireless networks, analog cellular systems provided primarily person-to-person communications enabling one person with a wireless user equipment (UE), e.g. a mobile phone or terminal, to communicate with another person on either a landline or other wireless user equipment. In this system, voice communications was typically the only content being transmitted. In second generation wireless networks, digital systems enabled the voice communications to be complemented with other services such as text messaging and access to data networks, which are growing rapidly. In third generation wireless networks, such as wideband code division multiple access (WCDMA) systems, a packet service session may include multimedia communications with person-to-person communication enhanced with high quality images and video, as well as access to information and services on public and private networks. In a packet service session mode, the packet service session may include the transfer of one or more packets, blocks, frames or cells of data depending on the communications protocol and may have a much longer duration of time than data sessions in the first and second generation wireless networks because the transfer of high quality images and video is likely

to contain a multiplicity of packets, blocks, frames or cells of data, all possibly taking different paths in the network in order to get from a content providing node to any given user equipment requesting such content.

As described in the "Background of the Invention" section of the patent application, in a WCDMA discontinuous radio link operation mode, the packet service session or mode can be active for a relatively long period of time, and due to a bursty nature of transferred data there is no data flow activity between an end-user and the communications network. During this period, the user equipment (UE) is only performing neighbor cell measurements, and not even performing these measurements if radio conditions are stable and new commands from the network have not been received. From a user's point of view, the terminal is consuming power but not providing good performance (long service time).

In the prior art, the UE receiver is active during a whole packet connection. (In WCDMA, during a packet transfer session the UE can be in CELL-FACH and CELL-DCH states.) A mechanism to provide power saving in the UE receiver by discontinuous reception during a packet session or mode does not exist in the prior art, including Müller's mobile communications system.

The operation time of the UE in the packet service mode is fully dependent on operator radio bearer (RB) release settings

(which are not specified) and how fast the connection is released after the packet transfer session.

In one case, since packet transmission can start in any frame, all slots in the frame in the downlink (DL) have to contain transport format combination indicator (TFCI) bits, the receiver (rx) has to be on during the whole frame in all frames in order to decode the TFCI, and TFCI decoding has to be performed in each frame. (Handover measurements are also assumed to be running continuously.) With the help of the TFCI, the UE detects whether the dedicated physical data channel (DPDCH) (packet) exists. If not all slots in the frame in the DL contain TFCI bits, then the UE has to use a pilot energy comparison method first to evaluate whether the DPDCH exists in the frame. In this case, all the slots only contain pilot and TFCI information only if DPDCH exists. In both of these cases, it means that the rx side has to be on and doing decoding in each slot in the frame. Thus, no rx side battery savings can be achieved during the dedicated physical control channel (DPCCH) gating.

Alternatively, in case the network is able to schedule the time instants when new packets are transferred to the user equipment (UE), it is possible to signal to the UE an activity period value, which indicates the radioframe(s) the UE's have to be able to receive and decode from the network. During the same

activity period, the UE is able to send measurement messages in reverse link (uplink) to the network.

2. The Claimed Solution

The inventors were the first to recognize the aforementioned problem in the art and provide a solution to the same. To solve this problem, the inventors designed a new and unique method for operating user equipment in a telecommunication network for receiving packets during a packet service mode. The method comprises the steps of:

receiving one or more packets during the packet service mode; and

entering the user equipment into a discontinuous reception mode by receiving either:

- a) two or more slots of each radio frame, or
- b) one or more frames; and

powering down receiver circuitry of the user equipment for either a) the remaining slots of the radio frame or b) one or more predefined periods, signaled by the telecommunication network, so as to establish a discontinuous radio link for the user equipment in the telecommunication network in a physical radio transmission layer when receiving the one or more packets while maintaining the logical connection in higher protocol layers during the packet service mode, as recited in claim 1.

In the discontinuous reception mode, the user equipment switches off the receiver circuitry for a part of the radio frame or one or more radio frames, which clearly occurs during the packet service mode when data is being transferred to the user equipment, as recited in dependent claims 10.

In effect, the whole thrust of the claimed invention is to turn the user equipment (UE) receiver off during the packet service mode in order to save precious battery power.

Similarly, independent claim 22 recites user equipment for operating in a telecommunication network for receiving one or more packets during a packet service mode and powering down receiver circuitry of the user equipment during the packet service mode in order to save precious battery power; while independent claim 26 recites a base station having similar features as that recited in independent claims 1 and 22.

VI. ISSUE

The following issue will be addressed in the Argument:

The non-obviousness of claims 1-5, 10, 12, 15-16 ad 21-29 over Müller (United States Patent No. 6,438,375).

The non-obviousness of claim 6 over Müller in view of Osawa (United States Patent No. 6,035,208).

The non-obviousness of claim 11 over Müller in view of Mizota (United States Patent No. 4,713,809).

The non-obviousness of claim 13-14 over Müller in view of Dent (United States Patent No. 5,757,789).

VII. GROUPING OF THE CLAIMS

The grouping of the claims is as follows:

Claims 1, 22 and 26 stand or fall together.

Claims 2-6, 10-16, 21, 23-25 and 27-29 stand or fall in relation to claims 1, 22 and 26.

The remaining claims 7-9 and 17-20 are grouped together as allowable claims.

VIII. ARGUMENTS

A. CLAIM 1

The rejection to claim 1 is respectfully traversed because Müller does not disclose a method for operating user equipment (UE) in a telecommunications network for receiving packets during a packet service mode, featuring the step of entering the user equipment (UE) into a discontinuous reception mode when receiving packets while maintaining the logical connection in higher protocol layers during the packet service mode, as claimed herein.

As stated in the patent application, page 2, lines 2-4, the prior art (including Müller) does not provide a mechanism to provide power saving by discontinuous reception during a packet mode. In the prior art, during long packet service sessions, the telecommunications network does not release the connection despite the fact that no data is being transferred, causing the consumption of valuable battery power in the user equipment (UE). The claimed invention recognized this "battery power consumption" problem in the art, and provided a solution thereto.

Foremost, paragraphs 1 and 3 of the Office Action both point to the paragraph bridging columns 8-9 in Müller, for disclosing the powering down of the user equipment during a packet service mode, which is the whole thrust of the claimed invention. However, in contrast to the claimed invention, Müller merely discloses a paging channel format technique using paging groups

(Figure 1) and associated paging time slots (Figure 5) for controlling the assess of the mobile stations (Figure 6) to the radio network (Figure 6) that is done in a manner to permit the mobile stations to conserve battery power, as specifically described in column 8, lines 3-8. As described in the paragraph bridging columns 8-9 of Müller, the mobile station 30 (Figure 6) determines its paging and network access restriction groups and checks the broadcast channel for any access restrictions for its group. Thereafter, the mobile station goes into an idle mode entering a sleep, battery conservation mode. It is respectfully submitted that Müller's mobile station (Figure 6) clearly does not go into this idle mode during a packet service mode when data is being received during its assigned paging time slot.

Further, when Müller's mobile station group time interval arrives, it powers up and reads messages during that "assigned" paging time slot or interval in order to get paging, network restrictions and other network-based communications information, as also described in the paragraph bridging columns 8-9 in Müller. If there are no messages for its group, Müller's mobile station returns to the idle mode. Consistent with that discussed above, it is respectfully submitted that Müller's mobile station clearly does not go into this idle mode during a packet service mode when data is being received during its "assigned" paging time slot or interval.

Furthermore, it is also respectfully submitted that none of the powering down functionality described in the paragraph bridging columns 8-9 of Müller is performed during a packet service mode, as claimed herein. The terms "packet", "packet session," and "packet service mode" are not even mentioned in the paragraph bridging columns 8-9 of Müller. In contrast, Müller's data processing and control unit 36 removes battery power from non-essential elements of the mobile station and enters a sleep, battery conservation mode when not tuning into the paging channel and when not receiving and reading a message being transmitted to it. Müller, column 9, lines 14-16, states that:

If there are no messages for its group, the control unit 36 returns the mobile station to the battery conservation sleep mode.

In view of this, it is respectfully submitted that Müller's mobile station is never in the sleep, battery conservation mode during its packet service mode, as claimed herein.

In view of this, it is respectfully submitted that the paragraph bridging columns 8-9 in Müller does not even remotely suggest that any of this battery conserving idle mode activity takes place during a packet service mode, as claimed herein. It is respectfully submitted that Müller merely discloses a way to place the user equipment (UE) in a sleep mode to conserve battery power, but clearly does not disclose doing so when receiving packets during a packet service mode, as claimed herein.

Finally, the reasoning in paragraph 3 of the Final Rejection is also taking the position that Müller, column 2, lines 29-53, discloses the limitation related to "receiving one or more packets during a packet service mode." However, consistent with that discussed above, it is respectfully submitted that Müller's mobile station is not powering down during a packet service mode when receiving packets during its assigned time slot or interval. Clearly, Müller, column 2, lines 29-53, describes a time-division multiplexed (TDM) based system for coordinating paging, network restrictions and other network-based communications between a mobile station and a radio network. In Müller's TDM-based system, the mobile station is clearly "assigned or associated with one timeslot in repeated frames of multiple timeslots" and not assigned or associated with all other timeslots. During the one and only "assigned" timeslot in the repeated frames of multiple timeslots, the mobile station has access to the radio network, can send or receive communications data to or from the radio network, and does not enter the sleep, battery conservation mode during this "assigned" time slot.² In contrast, during all other "non-assigned" timeslots in the repeated frames of multiple timeslots, the mobile station does not have access to the radio network, cannot send or receive data to or from the radio

² The mobile station may or may not form part of a group under restriction as shown in Figure 5.

network, and may enter the sleep, battery conservation mode. In view of this, Müller's mobile station does not enter the sleep, battery conservation mode in the one "assigned" timeslot when in a session or mode to exchange communications data with the radio network, as claimed herein. Moreover, Müller's mobile station clearly does not enter the sleep, battery conservation mode in the one "assigned" timeslot during a communications data exchange with the radio network, as claimed herein.

For all these reasons, it is respectfully submitted that Müller does not teach or suggest the method recited in claim 1.

B. INDEPENDENT CLAIMS 22 AND 26

Consistent with that set forth above, it is respectfully submitted that independent claim 22 recites user equipment for operating in a telecommunication network for receiving one or more packets during a packet service mode and powering down receiver circuitry of the user equipment during the packet service mode in order to save precious battery power. Similarly, independent claim 26 recites a base station having similar features as that recited in independent claims 1 and 22. For the reasons set forth above, it is respectfully submitted that Müller does not teach or suggest the user equipment or base station recited in independent claims 1 and 22.

C. THE ALLOWABLE CLAIMS 7-9 AND 17-20

In paragraph 8 of the Office Action, dependent claims 7-9 and 17-20 are deemed allowable if rewritten or amended to include the base claim and any intervening claims. In view of the aforementioned remarks, it is respectfully submitted that these claims are deemed patentable over the cited prior art.

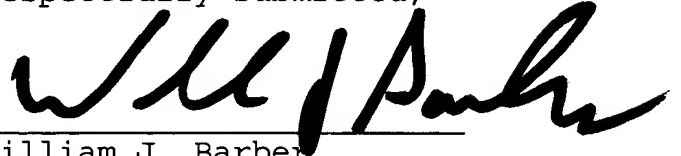
D. THE REMAINING DEPENDENT CLAIMS

The remaining claims 2-6, 10-16, 21, 23-25 and 27-29 depend directly or indirectly from independent claims 1, 22 or 26 and contain all the limitations recited therein. These remaining claims are rejected based on Müller alone, or Müller in combination with some other cited reference, including either Osawa, Mizota or Dent. It is important to point out that neither Osawa, Mizota nor Dent are cited by the Examiner in relation to, and clearly do not disclose, the aforementioned feature discussed above regarding the main independent claims 1, 22 and 25 in order to make up for the deficiency in the teaching of Müller. In view of the aforementioned remarks, it is respectfully submitted that these claims are deemed patentable over the cited prior art.

E. CONCLUSION

In view of this, it is respectfully submitted that the reasoning in the rejection of these claims is in error, and should be reversed.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'WJ Barber', written over a horizontal line.

William J. Barber
Attorney for Applicant
Registration No. 32,720

WJB/dap
November 22, 2004

IX. APPENDIX

The following claims are pending in the patent application:

1. (Previously amended) A method for operating user equipment in a telecommunication network for receiving packets during a packet service mode, comprising the steps of:

receiving one or more packets during a packet service mode;
and

entering the user equipment into a discontinuous reception mode by receiving either:

a) two or more slots of each radio frame, or

b) one or more frames; and

powering down receiver circuitry of the user equipment for either
a) the remaining slots of the radio frame or b) one or more predefined periods, signaled by the telecommunication network, so as to establish a discontinuous radio link for the user equipment in the telecommunication network in a physical radio transmission layer when receiving the one or more packets while maintaining the logical connection in higher protocol layers during the packet service mode.

2. (Previously amended) The method according to claim 1, **characterized in that** packet transmission starts in one out of every K radio frames.

3. (Previously amended) The method according to claim 1, **characterized in that** the two or more slots are consecutive slots in the radio frame.

4. (Previously amended) The method according to claim 1, **characterized in that** the two or more slots are non-consecutive slots in the radio frame.

5. (Previously amended) The method according to claim 1, **characterized in that** the user equipment has an active period of two or more consecutive slots or idle frame(s) prior to its own reception for performing neighbor measurements and power control functions.

6. (Previously amended) The method according to claim 5, **characterized in that** the user equipment adapts the active period depending on neighborhood conditions by increasing the active period when neighborhood conditions are unstable, and decreasing the active period when neighborhood conditions are stable.

7. (Previously amended) The method according to claim 1, **characterized in that** the user equipment responds to a change in the status of a transport format combination indicator (TFCI) field in the two or more slots of the radio frame for determining an end of a data packet.

8. (Previously amended) The method according to claim 7, **characterized in that** in a discontinuous reception mode the user equipment monitors a command in a transmission power control (TPC) field in the two or more slots of the radio frame and the status of the transport format combination indicator (TFCI) field in order to respond to commands from the telecommunications network.

9. (Previously amended) The method according to claim 7, **characterized in that** the user equipment determines a start of a new packet transmission by monitoring the status of the transport format combination indicator (TFCI) field in a previous radio frame before a new packet data radio frame.

10. (Previously amended) The method according to claim 1, **characterized in that** in the discontinuous reception mode the user equipment switches off the receiver circuitry for a part of the radio frame or one or more radio frames.

11. (Previously amended) The method according to claim 10, **characterized in that** the radio frame includes fifteen slots, and the part of the radio frame that the user equipment switches off the circuitry in the receiver is thirteen of fifteen slots.

12. (Previously amended) The method according to claim 1, **characterized in that** the user equipment receives higher layer signalling from a radio network controller or a base station in the telecommunications network that defines a period where the user equipment needs to perform a decoding of the radio frame or slots in order to detect if packet transmission is active.

13. (Previously amended) The method according to claim 12, **characterized in that** the user equipment determines that the radio frame contains data targeted by decoding the radio frame using a cyclic redundancy code and having a correct cyclic redundancy code result.

14. (Previously amended) The method according to claim 12, **characterized in that** the user equipment determines that the radio frame does not contain data targeted by decoding the radio frame using a cyclic redundancy code and having an incorrect cyclic redundancy code result; and waits an agreed period of time before decoding a subsequent radio frame.

15. (Previously amended) The method according to claim 1, **characterized in that** in a discontinuous period the user equipment waits a fixed discontinuous period of time.

16. (Previously amended) The method according to claim 1, **characterized in that** in a discontinuous period the user equipment waits a variable discontinuous period of time.

17. (Previously amended) The method according to claim 16, **characterized in that** the user equipment, a radio network controller or a base station in the telecommunication network or both perform an algorithm randomizing the variable discontinuous period.

18. (Previously amended) The method according to claim 16, **characterized in that** in a random non-receiving period the network defines the discontinuous period where the user equipment needs to perform a decoding of frame or slots in order to detect if packet transmission is active or not.

19. (Previously amended) The method according to claim 18, **characterized in that** if the packet transmission is not active, the next active period follows after a random period of N radio frames.

20. (Previously amended) The method according to claim 19, **characterized in that** a radio network controller or a base station in the network signals the value of N to the user equipment.

21. (Previously amended) The method according to claim 1, **characterized in that** the user equipment concurrently enters into a discontinuous transmit mode and performs one or more closed loop power control sequences for following the fading of an uplink, a downlink or both when its transmitter is active.

22. (Previously amended) User equipment for operating in a telecommunication network for receiving one or more packets during a packet service mode, **characterized in that**

the user equipment includes a user equipment power control loop module that enters the user equipment into a discontinuous reception mode for receiving two or more slots of each radio frame with receiver circuitry and for powering down the receiver circuitry for the remaining slots of the radio frame, so as to establish a discontinuous radio link for the user equipment in the telecommunication network in a physical radio transmission layer when receiving the one or more packets while maintaining the logical connection in higher protocol layers during the packet service mode.

23. (Previously amended) The equipment according to claim 22, **characterized in that** the power control loop module checks for packet transmission in one out of every K radio frames.

24. (Previously amended) The equipment according to claim 22, **characterized in that** the power control loop module checks two or more consecutive slots in the radio frame.

25. (Previously amended) The equipment according to claim 22, **characterized in that** the power control loop module checks two or more non-consecutive slots in the radio frame.

26. (Previously amended) A base station for operating in a telecommunication network for providing one or more packets during a packet service mode to user equipment having receiver circuitry, **characterized in that**

the base station includes a base station power control loop module that provides a signal to the user equipment to enter into a discontinuous reception mode for receiving two or more slots of each radio frame and to power down its receiver circuitry for the remaining slots of the radio frame, so as to establish a discontinuous radio link for the user equipment in the telecommunication network in a physical radio transmission layer when receiving the one or more packets while maintaining the logical connection in higher protocol layers during the packet service mode.

27. (Previously amended) The base station according to claim 26, **characterized in that** the signal contains information for the user equipment to check for packet transmission in one out of every K radio frames.

28. (Previously amended) The base station according to claim 26, **characterized in that** the signal contains information for the user equipment to check two or more consecutive slots in the radio frame.

29. (Previously amended) The base station according to claim 26, **characterized in that** the signal contains information for the user equipment to check two or more non-consecutive slots in the radio frame.



Practitioner's Docket No. 944-003.027-1/NC32439US

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Jussi Numminen

Application No.: 09 / 930,379 Group No.: 2666

Filed: August 15, 2001 Examiner: S. C. Hom

For: Method and Apparatus for Discontinuous Reception Scheme And Power Saving Mode For User Equipment In Packet Access Mode

Mail Stop Appeal Briefs-PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF
(PATENT APPLICATION—37 C.F.R. § 1.192)

NOTE: The phrase "the date on which" an "appeal was taken" in 35 U.S.C. 154(b)(1)(A)(ii) (which provides an adjustment of patent term if there is a delay on the part of the Office to respond within 4 months after an "appeal was taken") means the date on which an appeal brief under § 1.192 (and not a notice of appeal) was filed. Compliance with § 1.192 requires that: 1. the appeal brief fee (§ 1.17(c)) be paid (§ 1.192(a)); and 2. the appeal brief complies with § 1.192(c)(1) through (c)(9). See Notice of September 18, 2000, 65 Fed. Reg. 56366, 56385-56387 (Comment 38).

1. Transmitted herewith, in triplicate, is the APPEAL BRIEF in this application, with respect to the Notice of Appeal filed on September 20, 2004.

NOTE: "Appellant must, within two months from the date of the notice of appeal under § 1.191 or within the time allowed for reply to the action from which the appeal was taken, if such time is later, file a brief in triplicate. . . ." 37 C.F.R. § 1.192(a) (emphasis added).

CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10*

(When using Express Mail, the Express Mail label number is mandatory;
Express Mail certification is optional.)

I hereby certify that, on the date shown below, this correspondence is being:

MAILING

☒ deposited with the United States Postal Service in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

37 C.F.R. § 1.8(a)

37 C.F.R. § 1.10 *

☒ with sufficient postage as first class mail.

☐ as "Express Mail Post Office to Addressee"

Mailing Label No. _____ (mandatory)

TRANSMISSION

☐ facsimile transmitted to the Patent and Trademark Office, (703) _____

Signature

Debra Pongetti

(type or print name of person certifying)

Date: November 22, 2004

* Only the date of filing (§ 1.6) will be the date used in a patent term adjustment calculation, although the date on any certificate of mailing or transmission under § 1.8 continues to be taken into account in determining timeliness. See § 1.703(f). Consider "Express Mail Post Office to Addressee" (§ 1.10) or facsimile transmission (§ 1.6(d)) for the reply to be accorded the earliest possible filing date for patent term adjustment calculations.

2. STATUS OF APPLICANT

This application is on behalf of

☒ other than a small entity.

☐ a small entity.

A statement:

☐ is attached.

☐ was already filed.

3. FEE FOR FILING APPEAL BRIEF

Pursuant to 37 C.F.R. § 1.17(c), the fee for filing the Appeal Brief is:

☐ small entity \$ 170.00

☒ other than a small entity \$ 340.00

Appeal Brief fee due \$ 340.00

4. EXTENSION OF TERM

NOTE: 37 C.F.R. § 1.704(b) “. . . an applicant shall be deemed to have failed to engage in reasonable efforts to conclude processing or examination of an application for the cumulative total of any periods of time in excess of three months that are taken to reply to any notice or action by the Office making any rejection, objection, argument, or other request, measuring such three-month period from the date the notice or action was mailed or given to the applicant, in which case the period of adjustment set forth in § 1.703 shall be reduced by the number of days, if any, beginning on the day after the date that is three months after the date of mailing or transmission of the Office communication notifying the applicant of the rejection, objection, argument, or other request and ending on the date the reply was filed. The period, or shortened statutory period, for reply that is set in the Office action or notice has no effect on the three-month period set forth in this paragraph.”

NOTE: The time periods set forth in 37 C.F.R. § 1.192(a) are subject to the provision of § 1.136 for patent applications. 37 C.F.R. § 1.191(d). See also Notice of November 5, 1985 (1060 O.G. 27).

NOTE: As the two-month period set in § 1.192(a) for filing an appeal brief is not subject to the six-month maximum period specified in 35 U.S.C. § 133, the period for filing an appeal brief may be extended up to seven months. 62 Fed. Reg. 53,131, at 53,156; 1203 O.G. 63, at 84 (Oct. 10, 1997).

The proceedings herein are for a patent application and the provisions of 37 C.F.R. § 1.136 apply.

(complete (a) or (b), as applicable)

- (a) ☐ Applicant petitions for an extension of time under 37 C.F.R. § 1.136 (fees: 37 C.F.R. § 1.17(a)(1)-(5)) for the total number of months checked below:

Extension (months)	Fee for other than small entity	Fee for small entity
<input type="checkbox"/> one month	\$ 110.00	\$ 55.00
<input type="checkbox"/> two months	\$ 430.00	215.00
<input type="checkbox"/> three months	\$ 980.00	490.00
<input type="checkbox"/> four months	\$ 1530.00	765.00
<input type="checkbox"/> five months	\$ 2080.00	1040.00

Fee: \$ _____

If an additional extension of time is required, please consider this a petition therefor.

(check and complete the next item, if applicable)

- ☐ An extension for _____ months has already been secured, and the fee paid therefor of \$ _____ is deducted from the total fee due for the total months of extension now requested.

Extension fee due with this request \$ _____

or

- (b) ☒ Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

5. TOTAL FEE DUE

The total fee due is:

Appeal brief fee \$ 340.00

Extension fee (if any) \$ N/A

TOTAL FEE DUE \$ 340.00

6. FEE PAYMENT

- ☒ Attached is a ☒ check ☐ money order in the amount of \$ 340.00
- ☐ Authorization is hereby made to charge the amount of \$ _____
- ☐ to Deposit Account No. _____
- ☐ to Credit card as shown on the attached credit card information authorization form PTO-2038.

WARNING: Credit card information should *not* be included on this form as it may become public.

- ☐ Charge any additional fees required by this paper or credit any overpayment in the manner authorized above.

A duplicate of this paper is attached.

7. FEE DEFICIENCY

NOTE: If there is a fee deficiency and there is no authorization to charge an account, additional fees are necessary to cover the additional time consumed in making up the original deficiency. If the maximum six-month period has expired before the deficiency is noted and corrected, the application is held abandoned. In those instances where authorization to charge is included, processing delays are encountered in returning the papers to the PTO Finance Branch in order to apply these charges prior to action on the cases. Authorization to change the deposit account for any fee deficiency should be checked. See the Notice of April 7, 1986, 1065 O.G. 31-33.

- ☒ If any additional extension and/or fee is required,

AND/OR

- ☒ If any additional fee for claims is required, charge:

☒ Deposit Account No. 23-0442

- ☐ Credit card as shown on the attached credit card information authorization form PTO-2038.

WARNING: Credit card information should *not* be included on this form as it may become public.

Date: November 22, 2004

Reg. No.: 32,720

Customer No.: 4955



SIGNATURE OF PRACTITIONER

William J. Barber

(type or print name of practitioner)

Ware, Fressola, Van Der Sluys & Adolphson LLP

755 Main Street, P.O. Box 224

P.O. Address

Monroe, Connecticut 06468